L Number	Hits	Search Text	DB	Time stamp
1	13095	(chip or die) and ((pad or land) with (solder or ball or balls))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 21:30
2	4231	(chip or die) and ((pad or land) with (balls or bumps))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 22:04
3	2844	((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 23:10
4	86	(((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 20:59
5	263	(((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/778.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 21:26
6	229	((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/778.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 21:32
7	3	6291897.URPN.	USPAT	2004/03/07 21:12
8	29	("Re27934" | "3202888" | "4263606" | "4390771" | "4597519" | "4804132" | "5207585" | "5214308" | "5329423" | "5373111" | "5426266" | "5428298" | "5457344" | "5508561" | "5532613" | "5545589" | "5545920" | "5550083" | "5559054" | "5559366" | "5585282" | "5592736" | "5656858" | "5726501" | "5726502" | "5736790" | "5783865" | "5783870" | "5801449").PN.	USPAT	2004/03/07 21:12
9	9	("2934685" | "3809625" | "3871014" | "4369458" | "4600600" | "4838347" | "5001542" | "5010038" | "5207585").PN.	USPAT	2004/03/07 21:21
10	1	5955784.URPN.	USPAT	2004/03/07 21:22
11	166	(((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/780.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 21:24
12	115	((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/780.ccls.) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/778.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 21:26
13	96	(((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/779.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 21:26

14	55	((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/779.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/780.ccls.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 21:26
15	3	6444563.URPN.	USPAT	2004/03/07 21:27
16	4	("3871015" | "5266520" | "6020561" | "6066551").PN.	USPAT	2004/03/07 21:27
17	4231	(chip or die) and ((pad or land) with (balls or bumps))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 21:32
18	2844	((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 21:31
19	2362	(((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and (semiconductor or ic)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 21:31
20	1770	((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and (semiconductor or ic)) and (solder with (balls or bumps))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 21:32
21	1699	(((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and (semiconductor or ic)) and (solder with (balls or bumps))) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 21:58
22	1508	((((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and (semiconductor or ic)) and (solder with (balls or bumps))) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.)) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/778.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 21:33
23	1486	(((((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and (semiconductor or ic)) and (solder with (balls or bumps))) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.)) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/778.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.))) not ((((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/779.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/780.ccls.))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 23:12

| 24 | 946 | ((((((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and (semiconductor or ic)) and (solder with (balls or bumps))) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.)) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/778.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.))) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/779.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/780.ccls.))) and 257/$.ccls. | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2004/03/07 23:11 |
| 25 | 447 | ((((((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and (semiconductor or ic)) and (solder with (balls or bumps))) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.)) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/778.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.))) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/779.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/780.ccls.))) and 438/$.ccls. | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2004/03/07 21:57 |

26	66	((((((((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and (semiconductor or ic)) and (solder with (balls or bumps))) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.)) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/778.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.))) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/779.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/780.ccls.))) and 438/$.ccls.) not (((((((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and (semiconductor or ic)) and (solder with (balls or bumps))) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.)) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/778.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.))) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/779.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/780.ccls.))) and 257/$.ccls.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 21:58
27	1	("5955784").PN.	USPAT	2004/03/07 22:03
28	128	((chip or die) and ((pad or land) with (balls or bumps))) and ((pad or land) with (round or rounded or circle or semicircle))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 22:05
30	749	((chip or die) and ((pad or land) with (balls or bumps))) and ((pad or land) with (x or v or l or shape or round or rounded or circle or semicircle))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 22:08
29	74	(((chip or die) and ((pad or land) with (balls or bumps))) and ((pad or land) with (round or rounded or circle or semicircle))) and (@ad<20010212)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 22:05
31	189	((chip or die) and ((pad or land) with (balls or bumps))) and ((pad or land) with (x or v or l))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 22:08
32	124	(((chip or die) and ((pad or land) with (balls or bumps))) and ((pad or land) with (x or v or l))) and (@ad<20010212)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 22:57
33	1	("5578527").PN.	USPAT	2004/03/07 22:57
34	3574	((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20020212)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 23:26

35	2060	(((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20020212)) and 257/$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 23:26
36	1114	((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20020212)) and 257/$.ccls.) not (((((((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and (semiconductor or ic)) and (solder with (balls or bumps))) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.)) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/778.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.))) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/779.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/780.ccls.))) and 257/$.ccls.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 23:13
37	868	(((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20020212)) and 438/$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 23:26
38	868	((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20020212)) and 438/$.ccls.) and (@ad<20020212)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 23:26
39	536	(((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20020212)) and 438/$.ccls.) and (@ad<20020212)) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20020212)) and 257/$.ccls.) not (((((((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and (semiconductor or ic)) and (solder with (balls or bumps))) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.)) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/778.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/777.ccls.))) not (((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/779.ccls.) not ((((chip or die) and ((pad or land) with (balls or bumps))) and (@ad<20010212)) and 257/780.ccls.))) and 257/$.ccls.))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/03/07 23:27